

## REMARKS

Reconsideration of the above-identified patent application in view of the amendment above and the remarks below is respectfully requested.

Claims 29-30 and 32-33 have been canceled in this paper without prejudice or disclaimer of the subject matter thereof. Claims 11 and 44 have been amended in this paper. No new claims have been added in this paper. Therefore, claims 1-9, 11-28 and 34-54 are pending and are under active consideration.

Claims 16-28, 34-43 and 49-54 have been allowed.

Claims 1-3, 7, 8, 11 and 44 stand rejected under 35 U.S.C. 102(e) "as being anticipated by Kerr et al. (US Patent [Appln.] No. 2004/0062016)." In support of the rejection, the Patent Office states the following with respect to independent claims 1, 11 and 44:

Claim 1:

Kerr et al. (Kerr) discloses a tag comprising:

a. an inlay 10, the inlay comprising:

i. an antenna 30,40, and

ii. a wireless communication device 60 coupled to the

antenna; and

b. a plastic extrudate (fig. 12), the plastic extrudate being a unitary member with the antenna 30,40 and the wireless communication device 60 being embedded within the plastic extrudate.

See fig. 12 and 13

Claim 11:

Kerr discloses tag as comprising:

a. an inlay 10, the inlay comprising:

i. a carrier sheet 20

ii. an antenna 30,40 disposed on the carrier sheet 20,

and

iii. a wireless communication device 60 coupled to the

antenna;

b. a top plastic extrudate member 70; and

c. a bottom plastic extrudate member 20, wherein the top plastic extrudate member and the bottom plastic extrudate member cooperatively encapsulate the antenna and the wireless communication device.

Claim 44

Kerr discloses a method of continuously manufacturing a plurality of tags, the method comprising the steps of:

a. providing a single continuous strip (figs. 4 and 5) having a plurality longitudinal cavities at spaced intervals

b. depositing an inlay 10 within each cavity, the inlay comprising a carrier web 20, an antenna 30,40 disposed on the carrier web 20, and a wireless communication device 60 coupled to the antenna 30,40,

c. applying a single continuous web 70 to enclose each inlay, and

d. cutting (inherent) the continuous supply of inlays and the single continuous strip between successive antennae to yield individual tags.

Applicants respectfully traverse the subject rejection. Claim 1, from which claims 2-3 and 7-8 depend, recites “[a] tag comprising:

(a) an inlay, said inlay comprising

(i) an antenna, and

(ii) a wireless communication device coupled to said antenna; and

(b) a plastic extrudate, said plastic extrudate being a unitary member, with said antenna and said wireless communication device being embedded within said plastic extrudate.”

Claim 1 is neither anticipated by nor rendered obvious over Kerr et al. for at least the reason that Kerr et al. does not teach or suggest a tag comprising, amongst other things, a plastic extrudate that is a unitary member and within which an antenna and a wireless communication device are embedded. Instead, Kerr et al. discloses a medium 10 comprising an antenna layer 30 positioned between a base layer 20 and a material layer 50. The antenna layer 30 has antennae 40 formed

therein and has transponders 60 positioned on antennae 40 and disposed within voids 52 in material layer 50. Putting aside the issue of whether base layer 20 or material layer 50 individually constitutes a plastic extrudate, Applicants respectfully submit that base layer 20 and material layer 50 do not together constitute a **unitary, i.e., one-piece, member**. Instead, Kerr et al. specifically teaches that material layer 50 and base layer 20 are **two separate pieces**, each having its own top surface and bottom surface. Applicants refer the Patent Office to page 14, lines 20-22, of the present specification, where RFID tag 11 of Fig. 1 is contrasted with RFID tag 111 of Fig. 5 by noting that the RF inlay of tag 111 is positioned within a **two-piece plastic casing** whereas the RF inlay of tag 11 is positioned within a **unitary plastic extrudate**.

Claim 11 has been amended herein and now recites “[a] tag comprising:

(a) an inlay, said inlay comprising

(i) a carrier sheet,

(ii) an antenna disposed on the carrier sheet, and

(iii) a wireless communication device coupled to said antenna;

(b) a top plastic extrudate member; and

(c) a bottom plastic extrudate member, the bottom plastic extrudate member being shaped to include a cavity adapted to receive said antenna and said wireless communication device, wherein said top plastic extrudate member and said bottom plastic extrudate member cooperatively encapsulate said antenna and said wireless communication device.”

Thus amended, claim 11 is neither anticipated by nor rendered obvious over Kerr et al. for at least the reason that Kerr et al. does not teach or suggest a tag comprising, amongst other things, an antenna, a wireless communication device, and a bottom plastic extrudate member, the bottom

plastic extrudate member being shaped to include a cavity adapted to receive said antenna **and** said wireless communication device. Putting aside the issue of whether material layer 50 or additional material layer 90 of Kerr et al. constitutes a plastic extrudate, neither material layer 50 nor additional material layer 90 is shaped to include a cavity adapted to receive **both** an antenna **and** a wireless communication device. Instead, voids 52 of layers 50 and 90 are adapted to receive, at most, **only** a wireless communication device and not an antenna as well.

Claim 44 has been amended herein and now recites “[a] method of continuously manufacturing a plurality of tags, each tag comprising a plastic casing and an inlay encased within said plastic casing, said method comprising the steps of:

- (a) providing a single continuous strip having a plurality of cavities at spaced intervals,
- (b) providing a plurality of inlays, each inlay comprising a carrier sheet, an antenna disposed on said carrier sheet and a wireless communication device coupled to said antenna,
- (c) depositing an entire inlay within each of a plurality of cavities of said single continuous strip,
- (d) applying a single continuous web to said single continuous sheet to enclose each inlay within its corresponding cavity, and
- (e) cutting said single continuous strip and said single continuous web between successive cavities to yield individual tags.”

Claim 44 is neither anticipated by nor rendered obvious over Kerr et al. for at least the reason that Kerr et al. does not teach or suggest a method of continuously manufacturing a plurality of tags that comprises, amongst other things, depositing an **entire** inlay, i.e., a carrier sheet, an antenna, and

a wireless communication device, within a cavity. Instead, as noted above in connection with claim 11, Kerr et al. discloses depositing within each void 52, at most, **only** a wireless communication device and **not also** an antenna and a carrier sheet.

Accordingly, for at least the above reasons, the subject rejection should be withdrawn.

Claim 12 stands rejected under 35 U.S.C. 102(b) “as being anticipated by Grabau et al. (US Patent No. 6,451,154).” In support of the rejection, the Patent Office states the following:

Claim 12:

Grabau disclose an apparatus, thus, also a method of continuously manufacturing a plurality of tags, each tag comprising a plastic extrudate and an inlay surrounded by the plastic extrudate, the method comprising the steps of:

a. providing a continuous supply of inlays 15, the continuous supply of inlays comprising a continuous carrier web 44, a plurality of antennae 15A positioned on the continuous carrier web at spaced intervals and a wireless communication device coupled to each of the antennae,

b. feeding the continuous supply of inlays 15 into a cross-head extruder so as to yield a continuous block which includes the continuous supply of inlays surrounded by a plastic extrudate 48, and

c. cutting said continuous block between successive antennae so as to yield individual tags.

See front-page figure and figs. 3, 7-10.

Claim 12 recites “[a] method of continuously manufacturing a plurality of tags, each tag comprising a plastic extrudate and an inlay surrounded by said plastic extrudate, said method comprising the steps of:

(a) providing a continuous supply of inlays, said continuous supply of inlays comprising a continuous carrier web, a plurality of antennae positioned on said continuous carrier web at spaced intervals and a wireless communication device coupled to each of said antennae,

(b) feeding said continuous supply of inlays into a cross-head extruder so as to yield a continuous block which includes said continuous supply of inlays surrounded by a plastic extrudate, and

(c) cutting said continuous block between successive antennae so as to yield individual tags.”

Claim 12 is neither anticipated by nor rendered obvious over Grabau et al. for at least the reason that Grabau et al. does not teach or suggest a method of continuously manufacturing a plurality of tags that comprises, amongst other things, feeding a continuous supply of inlays into a cross-head extruder to yield a continuous block which includes the continuous supply of inlays surrounded by a plastic extrudate. In fact, Grabau et al. provides absolutely no disclosure of a **cross-head extruder**, let alone **feeding the inlays into a cross-head extruder so that the inlays are surrounded by a plastic extrudate**. Instead, all that is disclosed by Grabau et al. is the sandwiching of an inlay between a web 12 and a pressure sensitive adhesive 49.

Accordingly, for at least the above reasons, the subject rejection should be withdrawn.

Claim 4 stands rejected under 35 U.S.C. 103(a) “as being unpatentable over Kerr et al. (US Patent [Appln.] No. 2004/0062016).”

Applicants respectfully traverse the subject rejection. Claim 4 depends from claim 1. Claim 1 is patentable over Kerr et al. for at least the reasons given above. Therefore, based at least on its dependency from claim 1, claim 4 is patentable over Kerr et al.

Accordingly, for at least the above reasons, the subject rejection should be withdrawn.

Claims 5-6, 9 and 13 stand rejected under 35 U.S.C. 103(a) “as being unpatentable over Kerr et al. (US Patent [Appln.] No. 2004/0062016) in view of Grabau et al. (US Patent No. 6,451,154).”

Applicants respectfully traverse the subject rejection. Claims 5-6 and 9 depend from claim 1, and claim 13 depends from claim 12. Claim 1 is patentable over Kerr et al. for at least the reasons given above, and claim 12 is patentable over Kerr et al. for at least the reason that Kerr et al. does not teach or suggest a method that comprises, amongst other things, the step of feeding a continuous supply of inlays into a cross-head extruder to yield a continuous block which includes the continuous supply of inlays surrounded by a plastic extrudate. Grabau et al. fails to cure the deficiencies of Kerr et al. with respect to claims 1 and 12; therefore, based at least on their respective dependencies, claims 5-6, 9 and 13 are patentable over Kerr et al. in view of Grabau et al.

Furthermore, Applicants note that both Kerr et al. and Grabau et al. are directed at products that are typically made by converters of forms and labels. As such, Kerr et al. and Grabau et al. build a cavity around a pre-existing layer by overlaying the one or more layers over the inlay and carrier web. By contrast, the present invention is intended for a different end user. The plastic encapsulated inlay of the present invention is intended for harsh environments, such as, with reusable pallets that are repeatedly washed, commercial laundries, etc. The structures of Kerr et al. and Grabau et al. are not intended to be used in such environments since the paper laminates they create would likely dissolve or deteriorate if exposed to such harsh conditions.

Accordingly, for at least the above reasons, the subject rejection should be withdrawn.

Claims 14-15, 29-30, 32-33 and 45-48 stand rejected under 35 U.S.C. 103(a) “as being unpatentable over Grabau et al. (US Patent No. 6,451,154).” In support of the rejection, the Patent Office states the following:

Claim 14:

Though not discussed in Grabau, it would have been obvious to one of ordinary skill in the art to cool the continuous block before cutting the web because it is desirable for the device to be rigidly formed.

Claim 15:

Grabau discloses mounting an adhesive to the underside of the continuous block.

Claim 29:

Grabau discloses a continuous supply of inlays comprising:

- a. a continuous web 44,
- b. a plurality of antennae 15B disposed on the top surface of the continuous web at spaced intervals, and
- c. a plurality of wireless communication devices 15A, each wireless communication device being coupled to a corresponding antenna.

See front-page figure.

Though it is not clear whether material web 44 is constructed of, one skilled in the art would have readily recognized using any type of web applicable to the application.

Claim 30:

Each of the plurality of wireless communication devices is a radio frequency (RF) communication device.

Claim 32:

The plurality of antennae is printed onto the top surface of the continuous web.

Claim 33:

Each wireless communication device 15A is conductively coupled to a corresponding antenna.

Claim 45:



Grabau fails to disclose step of crimping. However, it would have been obvious to one skilled in the art to crimp the device before cutting because it is desired to secure the device to the web and the top cover or laminating layer.

Claim 46:

The rejection of claim 46 recites the rejection of claim 5, except it is a method claim.

Claim 47:

Grabau further discloses the step of coupling a mounting adhesive to the underside of the single continuous strip. See figure 12.

Claim 48:

It appears that the continuous strip in Grabau is formed by extrusion and cavities in the continuous strip are formed by thermoforming wherein the continuous web is formed by extrusion molding.

Insofar as the subject rejection relates to claims 29-30 and 32-33, the rejection is moot in view of Applicants' cancellation herein of these claims. Insofar as the subject rejection relates to claims 14-15 and 45-48, Applicants respectfully traverse.

Claims 14 and 15 depend from claim 12. Claim 12 is patentable over Grabau et al. for at least the reasons discussed above. Therefore, based at least on their respective dependencies from claim 12, claims 14 and 15 are patentable over Grabau et al.

Claims 45-48 depend from claim 44. As explained in the Amendment of July 10, 2007, claim 44 is patentable over Grabau et al. for at least the reason that Grabau et al. does not teach or suggest, amongst other things, depositing an inlay within each cavity, wherein the inlay comprises a carrier sheet, an antenna disposed on said carrier sheet and a wireless communication device coupled to said antenna. The Patent Office apparently acknowledges that claim 44 is patentable over Grabau et al. as the rejection of claim 44 based on Grabau et al. from the Office Action of January

10, 2007, has since been withdrawn. Therefore, based at least on their respective dependencies from claim 44, claims 45-48 are patentable over Grabau et al.

Accordingly, for at least the above reasons, the subject rejection should be withdrawn.

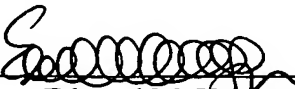
In conclusion, it is respectfully submitted that the present application is now in condition for allowance. Prompt and favorable action is earnestly solicited.

If there are any fees due in connection with the filing of this paper that are not accounted for, the Examiner is authorized to charge the fees to our Deposit Account No. 11-1755. If a fee is

required for an extension of time under 37 C.F.R. 1.136 that is not accounted for already, such an extension of time is requested and the fee should also be charged to our Deposit Account.

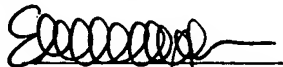
Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on February 11, 2008.

  
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